



February 1997

## ***Superfund Fact Sheet***

# ***Commencement Bay Nearshore/Tideflats Tacoma-Wide Update Tacoma, Washington***

There have been recent activities to reduce or remove sources of contamination at hazardous waste sites in the Tacoma area. These sites are being addressed by the U. S. Environmental Protection Agency (EPA) and the Washington Department of Ecology (Ecology) under the authority of Superfund, the Resource Conservation and Recovery Act (RCRA) and other environmental laws.

On December 12, 1996, a public meeting was held in Tacoma as part of EPA's on-going Sediment Disposal Forum. Several issues were brought up, and we hope that information in this fact sheet will address some of your concerns. A summary of the meeting will be sent to everyone who attended, participants of the Sediment Disposal Forum group, and will be placed in the information repositories. The main topic of the meeting was the City of Tacoma's report on cleanup options for the Thea Foss and Wheeler Osgood Waterways. The report, entitled "Screening of Remedial Options", describes the remedial alternative evaluation process, the City's preferred alternative for the Thea Foss and Wheeler Osgood Waterways, and the four sediment disposal sites proposed for further evaluation. The report was available for public comment until mid-January.

### **Information Contained In This Update**

- Request for updating the mail list (please read the last page)
- Activities in the different waterways in Commencement Bay
- Source control on Thea Foss/Wheeler Osgood and Hylebos Waterways
- On-going activities on the former Asarco Smelter and Asarco sediments
- News regarding the South Tacoma Channel
- What is available via the Internet

### **Commencement Bay Nearshore/Tideflats**

#### **Thea Foss and Wheeler Osgood Waterways**

EPA is reviewing the City of Tacoma's cleanup options and the comments received and will provide feedback to the City. At

that time, a summary of the comments and EPA's responses will be placed in the information repositories and will be available to the commenters. If you would like to review the comments, please contact Peggy Justus at (206) 553-2138 or Kevin Rochlin at (206) 553-2106.

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(Kevin will be taking over as Project Manager on this site.) EPA's comments, along with data from sampling which will occur in the spring of 1997, will be incorporated into the next and final report, called the Pre-Remedial Design Evaluation Report. This report will recommend a comprehensive cleanup plan for contaminated sediments in the Thea Foss and Wheeler Osgood Waterways and is expected to be available for public comment in late 1997.

For more information, please call **Peggy Justus**, EPA Project Manager, at (206) 553-2138, or **Kevin Rochlin**, EPA Project Manager, at (206) 553-2106.

#### **- Notifications and Requests**

EPA is continuing its efforts to gather information on current and historical sources of contamination and to identify parties potentially responsible for cleaning up the Thea Foss and Wheeler Osgood Waterways. Information request letters have been sent to parties who currently or formerly owned property or a business on the Thea Foss and Wheeler Osgood Waterways. "General Notice Letters" were also sent to parties on January 31, 1997 notifying them that EPA believes they are potentially responsible for some of the contamination in the waterways. The City of Tacoma has evaluated the extent of contamination in the waterways, and identifying potentially responsible parties is the next step before negotiation of the cleanup design can begin.

For more information, please call **Ken Marcy**, EPA Project Manager, at (206) 553-2782.

#### **- Source Control Information**

Source control activities are carried out under the direction of Ecology's Urban Bay Action Team. To ensure that Ecology's source control efforts are linked with our plans for sediment cleanup, EPA and Ecology have established five "milestones" for source control activities starting at identification and moving to successful control of a source. The five "milestones" for source control are:

1) Ecology identifies all confirmed ongoing sources of contamination to a waterway;

- 2) Ecology issues an administrative action, such as an order, decree, or permit, for each major source to ensure that these major sources are controlled;
- 3) Ecology ensures that the requirements of an Administrative Order at major sources are implemented;
- 4) Ecology issues permits to all sources within a waterway, not just the major sources; and
- 5) Ecology ensures that all work under the administrative action for each source in the waterway is complete.

Source control activities at the Head of Thea Foss and Wheeler Osgood Waterways have been completed through the second milestone. This means that administrative actions are in place requiring responsible parties to control all major sources. Milestone 4 has been completed for the Mouth of Thea Foss Waterway, which means that all major sources have been controlled, and that administrative actions are in place to control all other sources.

An update on EPA and Ecology's source control activities in the Thea Foss and Wheeler Osgood Waterway is provided below, as requested by attendees at the December 1996 public meeting.

#### **Non-storm water sources:**

##### **- Mouth of Thea Foss Waterway:**

**D Street Petroleum** - All discharges to the Thea Foss Waterway have been controlled and waste streams now go to the sanitary sewer.

**Unocal, TOSCO and Superior Oil** - Ecology issued National Pollutant Discharge Elimination System (NPDES) permits to regulate discharges of storm water and waste waters.

**Totem Marine Services** - A NPDES permit requires use of Best Management Practices to reduce/eliminate discharges to the Waterway.

##### **- Head of Thea Foss Waterway:**

**Tacoma Coal Gas Site** - Cleanup is underway under a Model Toxics Control Act (MTCA) Order with the City of Tacoma. Current efforts focus on determining how best to control groundwater contamination.

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JM Martinac Shipyard - Martinac cleaned the beach area of sandblast grit and contaminated waste materials this past summer. A NPDES permit is in place requiring Martinac to install all known, available, and reasonable methods of control, prevention, and treatment of storm water runoff within 1 year.

Investco Site - Ecology is planning to remove contaminated materials in the intertidal area this summer.

Storm water sources:

The City of Tacoma has established a procedure to find out if the discharge from a particular storm drain to the Thea Foss or Wheeler Osgood Waterways contains problem chemicals. If so, the City must identify the upstream source, and control it under Ecology's general NPDES permit for municipal storm water, issued July 1995. The City is also required to evaluate the effectiveness of storm water source controls.

The City has developed a "storm water process" to meet these requirements, consisting of the following steps:

- 1) evaluating discharges
- 2) upstream source identification
- 3) inspections/controls of upstream sources
- 4) follow-up
- 5) assessment of control effectiveness and reporting

Because two of the storm drains discharging to the Thea Foss Waterway are very large (237A and 237B, which are the Twin 96er's) and drain about 5,000 acres, the City is opting to implement their storm water process on a drain-by-drain basis for all storm drains discharging to the waterways. Under this process the City's target is to evaluate and control sources at the major storm drains by late 1997. So far the City has completed the storm water process for 3 storm drains, 218, 230, and 245 (see enclosed map).

The City is currently focusing its efforts on storm drain 254 and the Twin 96er's. The City and Ecology have installed sediment traps at multiple locations in the Twin 96er's and storm drain 230 to gather more

information. These samples are being used to help assess recontamination potential and to assist in storm water source identification and control.

Information about the City's efforts to control storm water contamination in the Thea Foss and Wheeler Osgood Waterways is contained in the City's October 30, 1996 letter to EPA. This and other documents describing the City's efforts to control storm water are available at the EPA office in Seattle.

For more information, please call Kris Flint, EPA Project Manager at (206) 553-8155 or Dave Smith at Ecology at (360) 407-6250.

Hylebos Waterway

Sediment studies in the Hylebos Waterway are continuing under a 1993 Administrative Order on Consent between EPA and the Hylebos Cleanup Committee (HCC). The HCC consists of the Occidental Chemical Co., Kaiser Aluminum and Chemical Co., Elf Atochem North America Inc., Asarco, Inc., and the Port of Tacoma.

In the past three years, over 200 sediment samples have been collected in the Hylebos Waterway and tested for chemical concentrations and toxicity to aquatic organisms. This information will be used to define the areas which require cleanup. The HCC has submitted a report to EPA which summarizes all sampling data collected to date and contains their recommendations for areas requiring cleanup. EPA is currently reviewing the HCC's proposals and is discussing the areas requiring cleanup with the HCC. Once EPA completes its review of this report and provides comments to the HCC, the report will be available to the public.

One of the key issues EPA is evaluating related to cleanup areas in the Hylebos Waterway is the polychlorinated biphenyls (PCB) cleanup level. Several parties have asked EPA to reevaluate the PCB cleanup level based on new scientific and site specific information which has been developed in the eight years since the Record of Decision was signed.

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We are currently evaluating whether the PCB cleanup level should be changed, based on information regarding the risks posed by PCBs in sediments to humans and wildlife and the extent of PCB contamination in Commencement Bay. Most of the PCBs in Commencement Bay are located in the Hylebos Waterway, although there is some PCB contamination in the Thea Foss Waterway.

If we determine that the PCB cleanup level should be changed, we will publish a fact sheet explaining the proposed change and the basis for the change and hold a 30-day public comment period.

For more information, please call Allison Hiltner, EPA Project Manager at (206) 553-2140.

#### ***- Proposed Prospective Purchaser Agreement***

The public comment period on the proposed prospective purchaser agreement for purchase of the former Cascade Timber Yard #1 property on the Hylebos Waterway, located at 2602 Marine View Drive, will run through February 10, 1997. We welcome your comments on the proposed settlement. This proposed agreement would allow Edman Holdings, L.L.C. to purchase the property without liability for costs of cleaning up sediment contamination associated with the property. Your comments should refer to the Edman Company PPA/Cascade Timber Yard #1 Property and be sent to Lori Houck, EPA Office of Regional Counsel MS/ORC-158, 1200 Sixth Avenue, Seattle, WA 98101. Please refer to the fact sheet dated January 16, 1997 for more detailed information about this settlement.

For more information, please call Peter Contreras, EPA Project Manager, at (206) 553-6708.

#### ***- Source Control Information - Occidental Chemical Corporation (RCRA Activities)***

Occidental is currently in full scale operation of its ground water treatment and injection and extraction systems, under a Dangerous Waste Permit. The treated ground water which is not used for

injection is discharged to the Hylebos with OCC's process water. The purpose of this program is to prevent non-permitted discharges of contaminated ground water from entering the Hylebos Waterway, recover contaminated ground water, and achieve the ground water quality standards stated in the Dangerous Waste Permit for the site. Water quality and water level data and the existing ground water monitoring program are being evaluated to determine the ground water corrective action program's effectiveness in meeting these goals.

For more information about cleanup activities at the Occidental facility, please call Catherine Massimino of EPA at (206) 553-4153.

#### ***- Natural Resource Trustee Injury Assessment Update***

In 1994 and 1995, the Commencement Bay Natural Resource Trustees conducted a series of investigations in the Hylebos Waterway to determine contaminant exposure and associated injuries to fish living in the waterway. In addition to assessing chemical contamination in the waterway, the three specific objectives of the fish studies were to:

- 1) assess the potential for contaminant associated injuries in juvenile salmon,
- 2) determine liver disease in flatfish, and
- 3) determine contaminant-induced reproductive dysfunction in flatfish.

The following results have been found to date:

- Juvenile salmon and adult flatfish are being exposed to a wide variety of contaminants, compared to fish from hatcheries or reference areas. Moreover, the concentrations of contaminants in juvenile chinook and chum salmon from the waterway are comparable to levels shown in previous studies to be associated with biological injury in juvenile chinook salmon.
- The existence of lesions and biochemical measures of early response to contaminant exposure in flatfish have not changed appreciably since previous studies which took place in late 1970's and 1980's. These

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studies indicate little or no improvement in the waterway during this period with respect to liver disease in flatfish.

- The problems associated with reproductive gland development in adult female English sole in the waterway are associated with exposure to polynuclear aromatic hydrocarbons (or PAHs, which are substances associated with petroleum products).

- Early sexual maturation of juvenile female English sole appears to be associated with exposure to chlorinated hydrocarbons (such as PCB's).

Additional studies planned over the next year include conducting a series of disease challenge and growth studies focusing on chinook salmon. The studies will evaluate which contaminants, and at what concentrations in the sediment, these contaminants cause injuries.

Additional information on the Natural Resource Trustee fish injury studies can be obtained from Robert Wolotira, NOAA Damage Assessment Center, Seattle WA, (206) 526-4360.

#### Middle Waterway

"Special Notice Letters" were sent to potentially responsible parties requesting their participation in negotiations for the design of the sediment cleanup on the Middle Waterway. Under Superfund law, these parties are considered potentially responsible for cleanup costs because either they are owners of contaminated sediments or property from which contaminants were released, or they are operators (past or present) of industries contributing to contamination.

The parties requested an extension of time to consider a proposal made by Simpson to dredge the mouth of the Middle Waterway and create a nearshore fill within the St. Paul Waterway. EPA has granted the parties an extension and expects to start negotiations in mid-February 1997. If negotiations are unsuccessful, EPA will consider issuing a Unilateral Administrative Order to some or all of the parties requiring them to conduct the design.

For more information, please call Elly Hale, EPA Project Manager, at (206) 553-1215.

#### St. Paul Waterway

EPA approved the annual monitoring report, which is required to ensure the cap is working well to contain the contamination and provide habitat for sea life in the waterway.

For more information, please call Karen Keeley, EPA Project Manager, at (206) 553-2141.

#### Former Asarco Smelter Site

The Smelter cleanup design work is grouped into Phase 1 and Phase 2. Currently Asarco is conducting the following Phase 1 activities:

- 1) geotechnical investigations for the on-site containment facility (OCF) location on Bennett Street, which will be a large raised area overlooking the bay,
- 2) verifying the volume of source area soils for the OCF (e.g., arsenic kitchens and tunnels area, cooling pond, copper refinery and fine ore bins building), and
- 3) dewatering investigations in the arsenic kitchens and cooling pond source areas.

Phase 1 activities need to be initiated first in the design schedule and be well underway before Phase 2 activities can begin. Phase 2 involves grading, terracing and capping the site, and shoreline stabilization and protection. EPA expects that Phase 1 and Phase 2 cleanup design activities to be complete by February 1999. At that time, cleanup activities will begin. It is expected that the site will be ready for redevelopment by the year 2003.

We invite your participation in the cleanup design process. Please note that this process does not involve future land use decision-making or environmental impact statement issues. For that type of involvement, please contact Karen Pickett, Asarco Information Center at (206) 756-5436. Your participation could take one of several forms.

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**Option 1.** If you are interested in keeping abreast of "big picture" items during remedial design, you can obtain copies of Asarco's monthly progress reports. The progress reports identify activities that have taken place on the site, test and sample results, deliverables submitted, actions scheduled for the next 6 weeks and unresolved delays encountered or anticipated that may affect the schedule.

**Option 2.** If you are interested in specific activities such as shoreline armoring, capping, surface water, etc., you can obtain a copy of the draft work plans and remedial design reports on that topic.

**Option 3.** If you are interested in all of the remedial design activities, your name can be included on the distribution list for all of the materials and information generated during this process.

**Option 4.** If you are interested, you are invited to participate in progress meetings typically held by EPA and Asarco on the fourth Tuesday of every month from nine to noon. Two-thirds of these meetings are held in Seattle, the rest are in Tacoma. Due to a scheduling conflict, the next progress meeting will be on Monday, February 24, 1997, at the EPA Regional Office in Seattle. You should contact Piper Peterson Lee several days in advance of these meetings to receive an agenda and the meeting location.

If you would like to be involved in any of the above options, please contact Piper Peterson Lee at (206) 553-4951.

#### **Asarco Sediments**

EPA has decided to delay the decision making process on the Asarco Sediments project in Tacoma/Ruston, Washington because additional information is necessary to select a cleanup proposal.

Asarco is placing a pilot cap over the sediments at the end of February 1997. Data collected from the project will help EPA determine if a cap will stay in place in spite of fast moving currents. Whether contaminants remain below the cap and whether marine life will repopulate the capped area will also be measured and monitored. In addition, Asarco has agreed

to examine the interaction between site ground water entering the Bay and the off-shore sediments. A task force has been comprised of federal, state and trustee organizations to study this issue.

Many of the elements involved in the former Smelter cleanup will have a positive impact on the off-shore sediments. We believe it is important to determine the extent of these upland cleanup activities before beginning a sediment cleanup project. For example, on-site surface water will be cleaned and re-routed on the site, a cap will be in place which will prevent dust and contaminated rainwater from entering the Bay, and the most contaminated soils will be consolidated in an OCF which should decrease the ground water contaminant concentrations entering the Bay.

EPA is planning to negotiate an amendment to the Administrative Order on Consent, which requires this work and assures that Asarco continues to make progress at this site. We continue to invite public, local, state, federal and trustee involvement throughout this project.

If you would like to be involved or kept informed of the activities on the site, please call Piper Peterson Lee, at (206) 553-4951.

#### **Ruston/North Tacoma Residential Cleanup**

Asarco has just completed its third year of cleaning up residential properties. To date, approximately 325 properties have been cleaned up. Cleanup activities have ceased for the winter and should begin again next spring. The target for 1997 is to clean up 125 additional properties.

For more information, please call Mary Kay Voytilla, EPA Project Manager, at (206) 553-2712.

<b>Commencement Bay - South Tacoma Channel</b>
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#### **Tacoma Landfill**

The City of Tacoma continues operating the landfill gas management system and the ground water pump & treat system.

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Ground water cleanup efforts are being monitored by sampling a network of wells in and around the landfill. Based on the monitoring results, modifications have been made to the ground water extraction system. The latest modifications include the installation of additional extraction wells, rehabilitation of certain wells, and closure of certain wells that are no longer needed. The additional ground water planned to be extracted may necessitate an expansion of the water treatment facility at the landfill. The latest work is anticipated to be completed in early 1997. The first annual report summarizing the activities and progress being made towards remediating contaminated ground water was produced in the Fall of 1996.

Gas probes on and around the landfill continue to be monitored to insure that the landfill gas is under control. The City will conduct a comprehensive air emissions monitoring study and ambient air monitoring study at the landfill in 1997 to assure that air emission sources are being appropriately controlled and that there is no negative impact on air quality in the vicinity of the landfill.

The City is continuing their attempts to locate the source of a leak in the landfill cap on the west side of the landfill. The leak is being intercepted prior to contacting garbage and is being discharged into the storm sewer.

For more information, please call **Bob Kievit**, EPA Project Manager, at (360) 753-9014.

#### **South Tacoma Field**

The Consent Decree, with Burlington Northern Railroad Company; BN Leasing Corporation; Amsted Industries Incorporated; Pioneer Builders Supply, Inc.; Atlas Foundry & Machine Company; South Tacoma L.L.C. and the City of Tacoma Department of Public Utilities at the South Tacoma Field Superfund Site, was approved by the Federal Court in Tacoma on January 10, 1997. A Remedial Design Work Plan was submitted to EPA on January 16th by Kennedy/Jenks Consultants on behalf of the Burlington Northern, Amsted, Atlas, South Tacoma L.L.C. and Pioneer Builders Supply Group.

The Work Plan sets the working schedule for performing necessary field activities and completing design. The City of Tacoma, Public Utilities is independently performing their portion of the work by removing contaminated soils from their drywell system. The larger responsible group will perform soil cleanup on their property and monitor the ground water contamination to determine if action is necessary.

For more information, please call **Cami Grandinetti**, EPA Project Manager, at (206) 553-8696.

#### **Well 12A**

The ground water treatment system continues to clean the ground water and protect the City of Tacoma's ground water from contamination, and organic contamination is being extracted from the Time Oil property by the vapor extraction system. The system is expected to operate for another two to three years.

For more information, please call **Kevin Rochlin**, EPA Project Manager, at (206) 553-2106.

#### **Internet Information**

New fact sheets for the Commencement Bay Nearshore/Tideflats Superfund site will be available on the Internet beginning in January 1997. The Internet address for this information is:

<http://www.epa.gov/r10earth/offices/oec/cercla.html>

This information is accessible by anyone with Internet access and a browser such as Netscape. Our web site also contains information about the partial deletions of the Commencement Bay Nearshore/Tideflats site and other Region 10 Superfund sites from the National Priorities List and a marine sediment data library which contains selected sediment sampling data for Superfund sediment cleanups, including St. Paul and Hylebos Waterways. We plan to add sediment data for other waterways in the future. The references to contact persons in the web site have been activated as "mailto" links. Clicking on the name pops up an E-mail window to the specified person.

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For more information about EPA Region 10's web site, please call Matt Gubitosa at (206) 553-4059.

Information on the Commencement Bay Natural Resource Trustee's natural resource damage assessment and restoration activities in Commencement Bay and the fish injury studies in the Hylebos Waterway is available on NOAA's (National Oceanic and Atmospheric Administration) web site. NOAA's Internet address is:

<http://www.darcnw.noaa.gov>

For more information about NOAA's web site, please call Gail Siani at (206) 526-4566.

### **For More Information**

Written information and technical documents regarding these projects are available for your review at the following locations:

#### **In Tacoma:**

Tacoma Public Library  
1102 Tacoma Avenue, Northwest Room  
Tacoma, WA

Citizens for a Healthy Bay  
771 Broadway  
Tacoma, WA

#### **In Seattle:**

U.S. Environmental Protection Agency  
7th Floor Records Center  
1200 Sixth Avenue  
Seattle, WA

Additional information for specific projects is available at the following locations:

### **Asarco-Related Projects**

Ruston Town Hall  
5117 North Winnifred  
Ruston, WA

Asarco Information Center  
5311 N. Commercial  
Tacoma, WA

### **Nearshore/Tideflats**

Puyallup Tribe  
2002 East 28th Street  
Tacoma, WA

Kobeitch Branch Library  
212 Browns Point Blvd.  
Tacoma, WA

### **Tacoma Landfill and South Tacoma Field**

South Tacoma Branch Library  
3411 South 56th  
Tacoma, WA

### **Questions**

If you have any questions or would like more information, please feel free to contact the representatives listed in this fact sheet or one of the following representatives. All EPA representatives can also be reached by calling our toll free number at 1-800-424-4372.

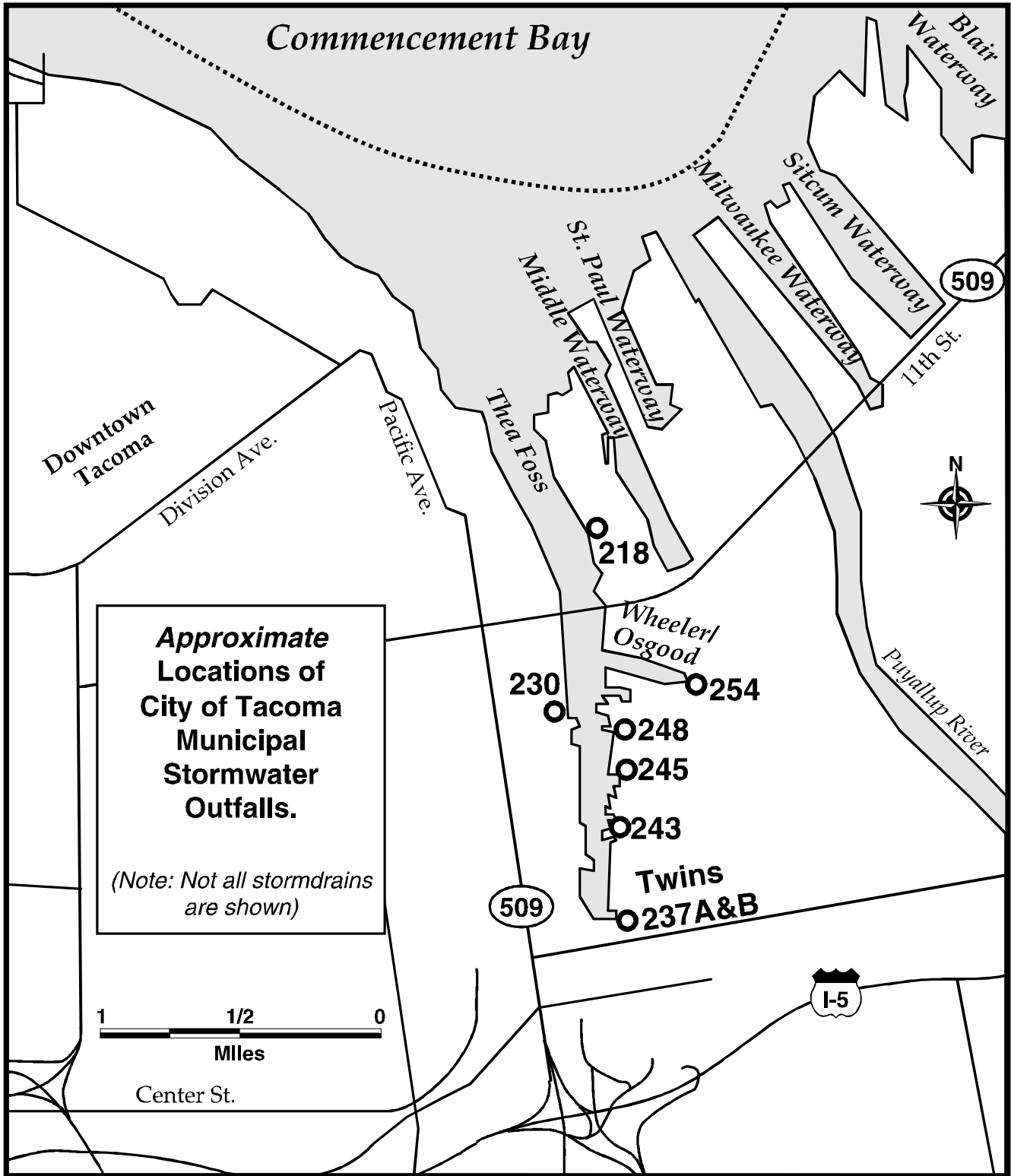
Jeanne O'Dell  
Environmental Protection Agency, Seattle  
(206) 553-6919

Chris Hempleman  
Washington Department of Ecology, Lacey  
(360) 407-7229

Andy Comstock  
Tacoma-Pierce County Health Department,  
Tacoma  
(206) 591-6538

For those with impaired hearing or speech, please contact EPA's telecommunications device for the hearing impaired (TDD) at (206) 553-1698. To ensure effective communication with everyone, additional services can be made available to persons with disabilities by contacting one of the EPA numbers above.





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## Updating the Mail List

We would like to update our mail list for distribution of the Tacoma-Wide and Commencement Bay-Wide fact sheets. This will not affect any separate mail lists you may be on. **NOTE: Please return this form if you would like to continue receiving these fact sheets. If you choose not to remain on our mail list, you can continue to access our quarterly fact sheets via the Internet.**

### Mail List Update

Please: ☐ leave me on the mail list  
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(please print name and address as it should appear on the mailing label)

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Affiliation (i.e., city, state, tribe, educator, citizen group, etc.):  
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#### Comments and Suggestions:

(Your comments help us to provide a better newsletter. Please take a moment to let us know how we're doing.)

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Please fold this form in half, staple or seal with tape, and mail to:

Jeanne O'Dell, EPA Region 10, 1200 Sixth Avenue, ECO-081, Seattle, WA 98101.

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***Superfund Update  
Commencement Bay***